VETCT
CONSULTANTS IN TELEMEDICINE

REPORTING SERVICE: XR

Species: Canine Breed: Sheepdog Sex: Male Entire Age: 6 months

Clinical History:

Owner requested radiographs be taken of the hips.

Details of study and technical comments: A ventrodorsal hip extended radiograph of the pelvis is provided for interpretation.

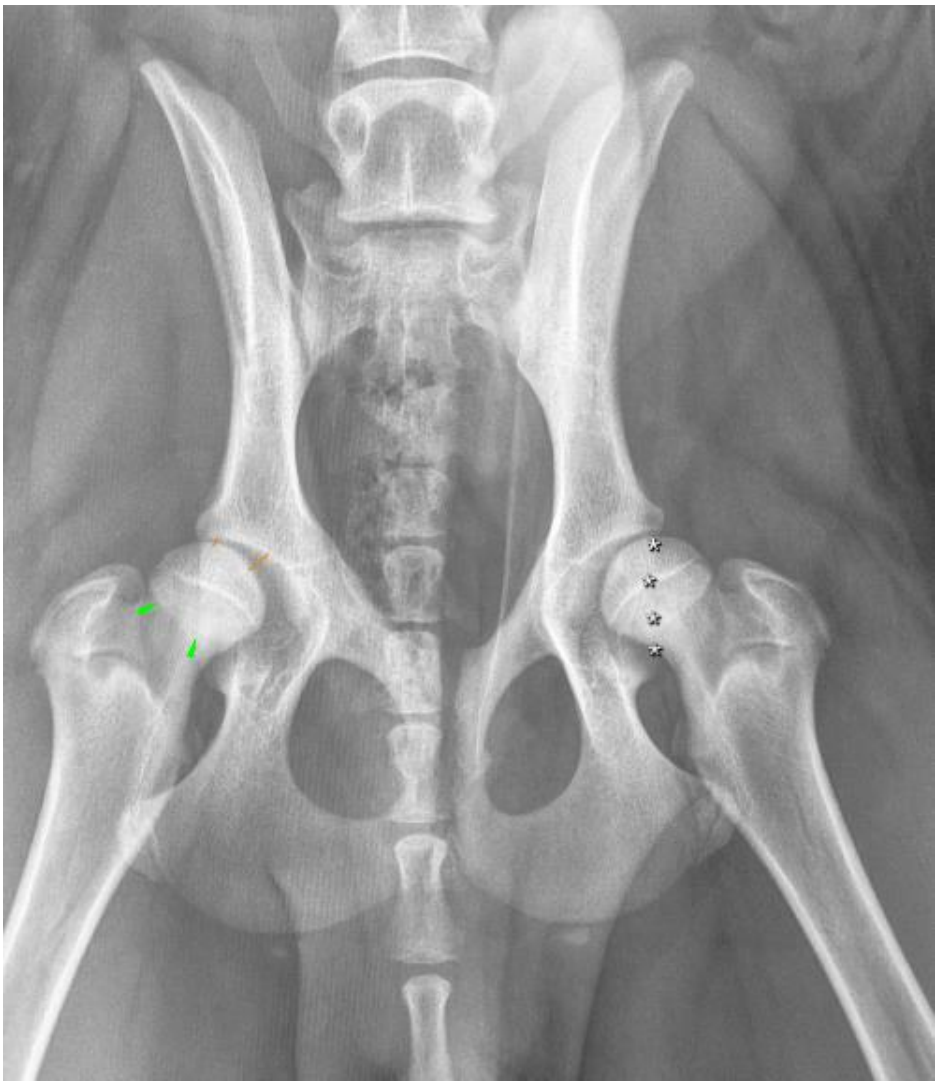
Some technical suggestions: see guidelines provided by the various hip screening programs, AAVMA, etc.

When performing VD hip extended radiographs of the pelvis for hip screening, the radiographs should meet the following criteria - femurs are parallel to each other, patella are central on the distal femoral trochlea, obturator foramen are symmetrical in size. When the pelvis is oblique, that radiographic obliquity can affect the appearance of the hip.

Sedation to the point of muscle relaxation is suggested, avoid imaging during estrus and pregnancy as this can affect hip laxity. Consider shielding gonads if possible (male dogs).

Diagnostic interpretation:

There is mild loss of parallelism between the femoral head and the acetabular cup bilaterally creating a joint space width wider medially (see lines). There is approximately 50-60% coverage of the femoral head by the dorsal acetabular margin bilaterally. Both femoral necks exhibit metaphyseal sclerosis (green arrow heads). There are no other substantial abnormalities noted.



Conclusions:

1. Mild hip laxity, restricted interpretation due to patient positioning
2. Bilateral metaphyseal sclerosis

Additional comments:

The finding of mild hip laxity may be due to the young age of the patient or may be due to early canine hip dysplasia, these can not be differentiated with radiographs alone in a juvenile dog. The radiographic assessment of canine hip dysplasia is most accurate at age 2 or older. Dynamic assessment of hip laxity through imaging (for example PennHIP method of measuring the distraction index) or through palpation (Ortolani sign) have been shown to improve accuracy of diagnosing hip dysplasia in juvenile patients. The finding of metaphyseal sclerosis is common in large breed puppies and may be due to circumferential femoral head osteophyte, but does not correlate to the development of hip dysplasia necessarily. The current radiographs provide a baseline assessment for future comparison